

Mamm Creek Technical Review Notes

Notice to Operators/Conditions of Approval attached to permits

1. Compliance with the most current revision of the Northwest Colorado Notification Policy
2. Garfield County Rulison Field Notice to Operators (sent via email)
3. Mamm Creek Field Notice to Operators
4. The proposed surface casing is more than 50 ft below the depth of the deepest water well within 1 mile of the surface location when corrected for elevation differences.
5. Operators shall comply with Rule 321. And it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

Permits Reviewed

1. All permits had COA/NTO
2. (3) Bill Barrett wells reviewed
 - Applications submitted prior to COGCC and EPA meeting
 - Production well drilled July – October 2010
 - For all (3) wells: surface casing set at 723 ft
 - TOC not covering shallow gas zones
 - Sundry notices requesting permission to vent approved
 - Log analysis by EPA shows shallow gas (cross over) present
3. (1) Mamm Creek well reviewed
 - Application submitted May 2010
 - Production well drilled ~Jan 2011
 - Surface Casing set at 1140 ft
 - Cemented along entire longstring up behind surface casing shoe (per schematic)
 - CBL analysis shows ratty cement on backside along entire production string